

Serial No. 10/520,238
Atty. Doc. No. 2002P02127WOUS

Amendments To The Claims:

Please amend the claims as shown.

1 – 12 (cancelled)

13. (currently amended) An oxidation resistant component, comprising:
a substrate; and
a protective layer, comprising:

an intermediate MCrAlY layer near the substrate wherein M is an element selected from the group consisting of Co, Fe, and Ni;

an outer layer arranged on the intermediate MCrAlY layer zone and comprising the elements Al in the range of 21wt% to 37wt%, Ni, Chromium, and Cobalt and having the structure of the phase β -NiAl, the outer layer further comprising a concentration of at least one element selected from the group consisting of Ti and Sc in the range of 0.01 and 1.0 wt%.

14. (cancelled)

15. (previously presented) The oxidation resistant component according to claim 13, wherein the protective layer consists of two separated layers.

16. (previously presented) The oxidation resistant component according to claim 13, wherein the component is a turbine component having application in a gas turbine.

17. (currently amended) The oxidation resistant component according to claim 13, the protective layer comprising wherein a continuously graded concentration of the composition of the intermediate and outer layers is inside the protective layer.

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18. (previously presented) The oxidation resistant component according to claim 13, wherein the outer layer is thinner than the intermediate layer.

19. (previously presented) The oxidation resistant component according to claim 13, wherein the intermediate MCrAlY-layer has a composition (in wt%): 10% – 50% Co, 10% – 40% Cr, 6% – 15% Al, 0.02% – 0.5% Y, Ni base.

20. (currently amended) The oxidation resistant component according to claim 13, wherein the intermediate MCrAlY-layer or the outer layer contains an additional element selected from the group consisting of (in wt%): 0.1%-2% Si, 0.2% - 8% Ta and 0.2% - 5% Re.

21. – 23. (cancelled)

24. (currently amended) The oxidation resistant component according to claim 13, wherein an element out of the group Hf, Zr, La, Ce, and other elements of the Lanthanide group is added to the outer layer in an amount of about 1 wt%.

25. – 27. (cancelled)

28. (previously presented) The oxidation resistant component according to claim 13, wherein a thermal barrier coating is formed on the outer layer.

29. (previously presented) The oxidation resistant component according to claim 28, wherein a heat treatment prior to applying the thermal barrier coating is accomplished in an atmosphere with a low oxygen partial pressure in the range of 10^{-7} to 10^{-15} bar.

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30. (currently amended) An oxidation resistant turbine component in a combustion turbine, comprising:

a substrate; and

a protective layer, comprising:

an intermediate MCrAlY layer near the substrate wherein M is an element selected from the group consisting of Co, Fe, and Ni, the intermediate MCrAlY layer comprising an amount of Al in the range of about 8% to 14 wt %;

an outer layer arranged on the intermediate MCrAlY layer zone and comprising the elements Al in the range of 3% to 6.5 wt % ~~21 wt % to 37 wt %~~, Ni, Chromium, and Cobalt and having the structure of the phase β -NiAl a pure γ -Ni matrix at a temperature of between about 900° to 1100°C; and

a metastable layer of aluminium oxide on top of the outer layer.

31. (currently amended) The oxidation resistant component according to claim 30, ~~wherein the intermediate MCrAlY~~ the outer layer has comprising a composition (in wt%): 10% to 50% Co, 10% to 40% Cr, 6% to 15% Al, 0.02% to 0.5% Y, 20% to 30% Cr, 10% to 30% Co, 5% to 6% Al and a Ni base and wherein the outer layer has a thickness of between about 3 and 20 micrometers.

32. (currently amended) The oxidation resistant component according to claim 30, wherein the outer layer further comprises an element of the group consisting of Hf, Zr, La, Ce and other elements of the Lanthanide group substituted for Y in a concentration in the range of about 0.01 to 1 wt %.